

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-22 (Cancelled)

23. (Previously Presented) A method for triggering automatic emergency braking in a first vehicle to avoid or mitigate the effect of a rear end collision with a second vehicle traveling ahead of the first vehicle, by implementing a predefined emergency braking deceleration, said method comprising:

determining an instantaneous driving situation of the first vehicle, based on a registered acceleration of the first vehicle;

determining whether a predefined warning condition is fulfilled based on said instantaneous driving situation of said first vehicle, and on said predefined emergency braking deceleration;

triggering a driver warning if said predefined warning condition is fulfilled; and

triggering an automatic emergency braking process, which causes said first vehicle to decelerate with the predefined emergency braking deceleration, after the driver warning has been triggered; wherein,

the warning condition includes, as target conditions, a predefined target safety distance and a predefined target relative speed between the first and second vehicles, which are to be attained after said automatic emergency braking process is completed;

in determining the instantaneous driving situation of the first vehicle, in addition to the registered acceleration of the first vehicle, a registered current relative acceleration between the first and second vehicles is also taken into account; and

triggering of said automatic emergency braking process is delayed until expiration of a predefined warning time period after the driver warning has been triggered.

24. (Previously Presented) The method as claimed in Claim 23, wherein the driver warning includes at least one of visual, acoustic, and haptic signals.

25. (Previously Presented) The method as claimed in Claim 24, wherein:

said driver warning can be perceived haptically by the driver of the vehicle, and comprises a partial braking process of the vehicle with a predefined partial braking deceleration; and

the predefined partial braking deceleration is smaller than the predefined emergency braking deceleration.

26. (Previously Presented) The method as claimed in Claim 23, wherein the automatic emergency braking process is triggered only if a given emergency braking condition is fulfilled and the predefined warning time period has expired.

27. (Previously Presented) The method as claimed in Claim 23, wherein the emergency braking deceleration is predefined in a permanent or adjustable fashion.

28. (Previously Presented) The method as claimed in Claim 23, wherein the warning time period is predefined in a permanent or adjustable fashion.

29. (Previously Presented) The method as claimed in Claim 23, wherein the target relative speed is predefined in a permanent or adjustable fashion.

30. (Previously Presented) The method as claimed in Claim 29, wherein the permanently predefined target relative speed between the vehicle and vehicle traveling in front has a value of approximately zero.

31. (Previously Presented) The method as claimed in Claim 23, wherein the target safety distance is predefined in a permanent or adjustable fashion.

32. (Previously Presented) The method as claimed in Claim 23, wherein, when it is determined that the driver is attentive, or that the risk of a rear end collision is reduced, the driver warning is not triggered.

33. (Previously Presented) The method as claimed in Claim 23, wherein, when the driver is attentive or the risk of a rear end collision is reduced, a driver warning which has already been triggered is terminated or changed, or the automatic emergency braking process is not triggered.

34. (Previously Presented) The method as claimed in Claim 23, wherein the automatic emergency braking process is triggered automatically when the predefined warning time period expires if the driver warning is not aborted during the predefined warning time period.

35. (Previously Presented) The method as claimed in Claim 23, wherein an automatic emergency braking process which has already been triggered is

aborted if a detected emergency braking time period or the predefined target relative speed and the predefined target safety distance are attained.

36. (Previously Presented) The method as claimed in Claim 23, wherein:

the driver warning comprises at least two warning stages which are triggered in chronological succession within the predefined warning time period of the driver warning; and

each warning stage is assigned a predefined warning stage time period.

37. (Previously Presented) The method as claimed in Claim 36, wherein the warning stage time period is predefined in a permanent or adjustable fashion.

38. (Currently Amended) ~~The method as claimed in Claim 37, wherein, A~~
method for triggering automatic emergency braking in a first vehicle to avoid or
mitigate the effect of a rear end collision with a second vehicle traveling ahead of
the first vehicle, by implementing a predefined emergency braking deceleration,
said method comprising:

determining an instantaneous driving situation of the first vehicle, based on a registered acceleration of the first vehicle;

determining whether a predefined warning condition is fulfilled based on said instantaneous driving situation of said first vehicle, and on said predefined emergency braking deceleration;

triggering a driver warning if said predefined warning condition is fulfilled; and

triggering an automatic emergency braking process, which causes said first vehicle to decelerate with the predefined emergency braking deceleration, after the driver warning has been triggered; wherein,

the warning condition includes, as target conditions, a predefined target safety distance and a predefined target relative speed between the first and second vehicles, which are to be attained after said automatic emergency braking process is completed;

in determining the instantaneous driving situation of the first vehicle, in addition to the registered acceleration of the first vehicle, a registered current relative acceleration between the first and second vehicles is also taken into account;

triggering of said automatic emergency braking process is delayed until expiration of a predefined warning time period after the driver warning has been triggered;

the driver warning comprises at least two warning stages which are triggered in chronological succession within the predefined warning time period of the driver warning;

each warning stage is assigned a predefined warning stage time period;

the warning stage time period is predefined in a permanent or adjustable fashion; and

after a first warning stage has been triggered, at least one further warning stage is triggered only if a predefined warning stage condition assigned to the further warning stage is fulfilled.

39. (Previously Presented) The method as claimed in Claim 37, wherein, when the driver is attentive or when the risk of a rear end collision is reduced, at least one of the warning stages which has already been triggered is terminated or further warning stages are prevented.

40. (Previously Presented) The method as claimed in Claim 39, wherein attentiveness of the driver is detected on the basis of an activation of at least one operator control element which controls longitudinal or lateral dynamics of the vehicle.

41. (Previously Presented) The method as claimed in Claim 39, wherein a reduction in the risk of a rear end collision is detected by reference to at least one of an increasing distance between the first and second vehicles and a decreasing relative speed between the first and second vehicles.

42. (Previously Presented) The method as claimed in Claim 23, wherein the instantaneous driving situation of the first vehicle is determined as a function of at least one of the detected distance between the first and second vehicle, the detected relative speed between the first and second vehicles, detected speed of the first vehicle, detected relative acceleration between the first and second vehicles, detected acceleration of the first vehicle, inclination of a roadway on which the first vehicle travels, and coefficients of friction between the roadway and wheels of the vehicle.

43. (Previously Presented) The method as claimed in Claim 23, wherein, when automatic emergency braking is triggered, a warning is issued to vehicles traveling in front or behind.

44. (Previously Presented) Apparatus for carrying out automatic emergency braking in a first vehicle to avoid, or mitigate the effects of, a rear end collision with a second vehicle traveling ahead of the first vehicle by implementing a predefined emergency braking deceleration, said apparatus comprising an evaluation unit which triggers a driver warning when at least one predefined warning condition stored in the evaluation unit is fulfilled; wherein:

an instantaneous driving situation of the first vehicle is determined based on a registered acceleration of the first vehicle;

fulfillment of the warning condition requires that, based on the instantaneous driving situation of the first vehicle, and on said predefined emergency braking deceleration, an automatic emergency braking process which causes the vehicle to decelerate with the predefined emergency braking deceleration, is to be triggered by suitable actuation of braking means of the vehicle;

the warning condition includes, as target conditions, a predefined target safety distance and a predefined target relative speed between the first and second vehicles, which are to be attained when said automatic emergency braking process is completed;

in determining the instantaneous driving situation of the first vehicle, in addition to the registered acceleration of the first vehicle, a registered current relative acceleration between the first and second vehicles is taken into account;

said automatic emergency braking process is triggered only after the driver warning has been triggered and a predefined warning time period has expired thereafter.